One Week
Online Short Term Course
on
Cryogenics & Composites: Theory & Applications
(CCTA 2020)
(3-7, August 2020)

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For Registration: *Click the link below or Scan the QR code*
https://forms.gle/n5dtCDX6bNCPut2RA

- Single registration to attend all lectures.
- Free for all but have limited seats up to 200.
- Prior registration is mandatory to attend STC.
- E-certificate will be issued to the participants on successful participation of the course.
- Webinar meeting link and other instructions will be shared via e-mail to all registered participants.

OUR DISTINGUISHED SPEAKERS

PROF. S. KASTHURIRENGAN
IISC BANGLORE

DR. UPENDRA BEHERA
IISC BANGLORE

DR. GAURAV MANIK
IIT ROORKEE

DR. P. K. MAJI
IIT ROORKEE

DR. AVINASH PRASHAR
IIT ROORKEE

DR. SUSHANTA KUMAR SAHOO
CSIR – NIIST,
THIRUVANANTHAPURAM,
KERALA

DR. GAURAV GUPTA,
VIT UNIVERSITY, VELLORE

DR. MADHAB BERA
BHANSALI ENGINEERING
POLYMER LIMITED
RAJASTHAN

DR. RAVI VERMA
DR B R AMBEDKAR NIT
JALANDHAR

About NIT, Jalandhar

Dr B R Ambedkar National Institute of Technology Jalandhar is among the 31 NITs established by Ministry of HRD, Government of India. The institute came into existence in the year 1987 (earlier Regional Engineering College, Jalandhar) and obtained the status "Institute of National Importance" by Act of Parliament 2007. The institute is offering B. Tech. programme in various disciplines such as Computer Science and Engineering, Electronics and Communication Engineering, Instrumentation and Control Engineering, Mechanical Engineering, Civil Engineering, Textile Technology, Biotechnology, Chemical Engineering, and Industrial and Production Engineering. In addition to that, the institute offers M. Sc. programmes in Mathematics, Physics and Chemistry, M.Tech. programmes in all the Engineering departments, and Ph.D. programmes in various disciplines.

About the Short Term Course

A composite material can be defined as combination of two or more materials, which will result in better properties compare to individual component. Composites are one of the most widely used materials because of their adaptability. With the advancement in the technology, new composite materials at low temperature for room temperature and cryogenics materials are being developed. The composite material can be used for various applications by the researchers by changing the composition of the filler. The studies on the various properties of composite are the latest topic for the research. In this Short-Term Course (STC) various properties of composite material like mechanical, thermal along with the application of composite materials will be covered from room temperature down to cryogenic temperature. By the end of this STC participants will be able to understand comprehensively the variation in the mentioned properties of base material by mixing the filler content. This STC is also important for those candidates who are looking for problem definition in the field of composites.

Topics to be covered

- Basic of cryogenic
- Application of cryogenic
- Application of Vortex tube
- Properties of composites at cryogenic temperature
- Role of composite in space application
- Anelasticity in metal matrix composite
- Thermal properties of metal epoxy composites

Departmental Organizing Committee

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Dr R Pahuja
Er N Singh
Dr A Sikander
Prof. A. K. Jain
Dr K S Nagla
Dr A K Singh
Dr Sathiya S
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S. No.	Speaker Name	Title of Talk	Day and Time
1.	Prof. S. Kasthurirengan IISC Bangalore	Cryogenics: Fundamental and Applications	3 August 2020 11:00 AM – 12:30 PM
2.	Dr. Avinash Parashar IIT Roorkee	Mechanics of Composites and Nano-Composites	3 August 2020 02:00 PM – 3:30 PM
3.	Prof. S. Kasthurirengan IISC Bangalore	Materials for Cryogenic application	4 August 2020 11:00 AM – 12:30 PM
4.	Dr. Upendra Behera IISC Bangalore	Storage and Transfer of Cryogenic Fluids	4 August 2020 02:00 PM – 3:30 PM
5.	Sushanta Kumar Sahoo CSIR-NIIST, Thiruvananthapuram, Kerala	Bio-based Polymer composites: Green materials for future generation	5 August 2020 11:00 AM – 12:30 PM
6.	Dr. Upendra Behera IISC Bangalore	Vortex Tube Technology and its Applications	5 August 2020 02:00 PM – 3:30 PM
7.	Dr. Gaurav Manik IIT Roorkee	Light weight high strength polymer composites: Modeling and Development	6 August 2020 11:00 AM – 12:30 PM
8.	Dr. Madhab Bera Bhansali Engineering Pl;oymer Limited, Rajasthan	Structure-Property Relationships in Graphene based Polymer Nanocomposites.	6 August 2020 02:00 PM – 3:30 PM
9.	Dr. P K Maji IIT Roorkee	Polymer Nano Composite for advance applications	7 August 2020 11:00 AM – 12:30 PM
10.	Dr. Durgesh Nadig IISC Bangalore	Effects of low temperatures on mechanical properties of materials	7 August 2020 02:00 PM – 3:30 PM
11.	Dr. Gaurav Gupta / Dr. Ravi Verma VIT Vellore/ NIT Jalandhar	Particulate filled polymer composites for thermal Insulation / Role of composite adhesive towards cryosorption pump	8 August 2020 11:00 AM – 12:30 PM